

**VOLUME 4 AIRCRAFT EQUIPMENT AND OPERATIONAL AUTHORIZATIONS**  
**CHAPTER 10 EVALUATE OPERATOR'S APPLICATION TO CONDUCT FLIGHT IN**  
**REDUCED VERTICAL SEPARATION MINIMUM AIRSPACE**

**Section 1 Evaluate an Operator's Application to Conduct Flight in Reduced Vertical  
Separation Minimum Airspace**

**4-1231 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY  
CODES.**

**A. Operations:** 1411, 1413.

**B. Maintenance:** 3411, 3413.

**C. Avionics:** 5411, 5413.

**D. Air Transportation Oversight System (ATOS) Element:** 5.1.9.

**4-1232 OBJECTIVE.** This chapter provides guidance for evaluating applications for an operator to conduct flight in airspace where Reduced Vertical Separation Minimum (RVSM) is applied; evaluating and approving RVSM maintenance programs associated with an application; and issuing operations specifications (OpSpecs), management specifications (MSpecs) or a letter of authorization (LOA), as appropriate. OpSpecs, MSpecs, and LOAs are issued using the Web-based Operations Safety System (WebOPSS) (see Volume 3, Chapter 18, Section 2, Automated Operations Safety System).

**4-1233 GENERAL.**

**A. Requirements.** The current regulation in Title 14 of the Code of Federal Regulations (14 CFR) part 91 appendix G states the requirements an operator and the operator's aircraft must comply with in order for a person to operate a civil aircraft of U.S. registry in RVSM airspace.

**B. Authorization.** The Administrator authorizes operators to conduct flight in RVSM airspace. The criteria evaluated to issue this authorization consist of three basic elements:

NOTE: Foreign commercial operators of civil aircraft of U.S. registry must comply with 1) and 2) below. The operating policies and procedures for pilots, and dispatchers, to include training, are the responsibility of the State of the Operator. For additional guidance, see Volume 12.

1) The operator's aircraft complies with the requirements of part 91 appendix G, § G2.

2) The operator's maintenance program complies with the requirements of part 91 appendix G, § G3.

3) The operator has adopted RVSM operating policies and procedures for pilots (and, if applicable, dispatchers) acceptable to the Federal Aviation Administration (FAA).

### **C. Background.**

1) The FAA implemented RVSM in all of the airspace in the lower 48 states, Alaska, the San Juan flight information region (FIR), Gulf of Mexico, and Atlantic High Offshore Airspace on January 20, 2005. To safely operate in RVSM airspace, all aircraft needed to be configured and inspected to ensure the applicable RVSM performance requirements were complied with.

2) Since domestic RVSM implementation occurred in 2005, most operators have now developed appropriate RVSM maintenance and pilot knowledge or training programs, and the initial one-size-fits-all approach is now unwarranted with respect to the processing of new RVSM authorizations. There has also been a lack of consistency and various levels of quality with respect to documentation submitted by RVSM applicants, as well as some processing delays and inconsistent standards being applied among Flight Standards District Offices (FSDO).

3) This guidance has therefore been modified to create guidelines that improve efficiency in the authorization process. The core of these guidelines are the recognition of the three key elements of any RVSM authorization—an RVSM-Compliant Aircraft (see subparagraph 4-1234C), an RVSM-Approved Maintenance Program (see subparagraph 4-1235C), and properly trained aircrew who have met applicable RVSM-Knowledgeable Pilots requirements (see subparagraph 4-1236B)—and a “decision matrix” (see paragraph 4-1237) that will allow the FAA to more efficiently direct attention to only those elements that require initial review. An RVSM-Compliant Aircraft, an RVSM-Approved Maintenance Program, and RVSM-Knowledgeable Pilots, as each are defined in the above referenced paragraphs, are also referred to in this guidance individually or together as an “RVSM Authorization Element” or the “RVSM Authorization Elements.”

4) The guidelines set out in this chapter are not designed to negate or replace other existing policy and guidance with respect to RVSM authorizations, but are designed to make the RVSM authorization process more efficient.

5) The guidelines set out in this chapter do not negate or cause the reevaluation of any previously issued RVSM authorizations. Instead, the procedures should be adopted only as operators seek new or amended RVSM authorizations subsequent to the publication of these modified guidelines.

### **D. Responsibilities.**

1) Using the procedures set out in paragraph 4-1237, the appropriate FSDO, certificate-holding district office (CHDO), or International Field Office (IFO) manager, in coordination with Avionics/Maintenance Airworthiness aviation safety inspectors (ASI) and Operations ASIs, should coordinate the evaluation of the aircraft RVSM eligibility, RVSM maintenance program, and operator’s RVSM program.

2) The principal avionics inspector (PAI) or the principal maintenance inspector (PMI) will make the determination of whether or not the aircraft meets the requirements of an RVSM-Compliant Aircraft.

3) Either the PAI or PMI will evaluate whether the operator's proposed maintenance program meets the requirements of an RVSM-Approved Maintenance Program (see paragraph 4-1235).

4) The principal operations inspector (POI) will evaluate and make the determination of whether the operator's pilots meet the knowledge requirements of part 91 appendix G, as defined as RVSM-Knowledgeable Pilots and further described in paragraph 4-1236.

5) The FSDO, CHDO, or IFO will issue an OpSpec, MSpec or LOA, as appropriate, to authorize an operator to conduct flight in RVSM airspace.

NOTE: The ASI may become knowledgeable of any other existing authorizations or specifications issued to a specific aircraft using the Operator Aircraft Viewer Report, available in the WebOPSS.

6) As further described in paragraph 4-1237, the applicant will obtain and submit all documents that establish the eligibility of its aircraft as an RVSM-Compliant Aircraft. Operators are encouraged to use the Decision Matrix in subparagraph 4-1237C. Operators should contact the PAI/PMI early in the application process to discuss what documents may be needed to establish eligibility of an aircraft. The applicant will submit evidence to the FAA that it is capable of operating and maintaining each aircraft or aircraft group for which it applies, and an RVSM maintenance program for acceptance as an RVSM-Approved Maintenance Program. The applicant will establish that each pilot has adequate knowledge of RVSM requirements, policies, and procedures.

#### **4-1234 AIRCRAFT ELIGIBILITY.**

**A. Compliance for Authorization.** An aircraft may be authorized to conduct RVSM operations if the Administrator finds that it complies with the requirements of part 91 appendix G, §G2. Aircraft may be produced RVSM-compliant or brought into compliance through the application of FAA-approved Service Bulletins (SB), Service Letters (SL), or Supplemental Type Certificates (STC) that apply to the specific aircraft type or group and, if applicable, the specific aircraft serial number.

**B. Requirements for Eligibility.** The PAI or PMI makes the determination of aircraft RVSM eligibility after reviewing substantiating documents developed to meet the following applicable requirements.

1) Aircraft not produced under type certificate (TC) in accordance with 14 CFR part 21, § 21.123 to meet requirements as stated in part 91 appendix G. The PAI and the PMI ensure that the inspections and/or modifications required to meet the specified performance have been performed and documented. At a minimum, these items should include appropriate design modification on the specific serial numbered aircraft; Airplane Flight Manual Supplement (AFMS) (AFMS statement of RVSM capability); instructions for continued

airworthiness (ICA); and aircraft logbook information that reflects the STC installation and ICA compliance.

2) Aircraft produced under TC in accordance with § 21.123 to meet requirements as stated in part 91 appendix G. The PAI/PMI ensures that the Airplane Flight Manual (AFM) or aircraft Type Certificate Data Sheet (TCDS) denotes the RVSM eligibility and that the appropriate Manufacturing Inspection District Office (MIDO) has performed the initial finding of conformity with type design.

NOTE: The PAI/PMI may accomplish the determination that an aircraft is RVSM-compliant through the examination of applicable documents and/or data. Physical inspection of an airframe remains at the discretion of the inspector.

**C. RVSM-Compliant Aircraft.** Upon determination that an aircraft is RVSM-compliant, the PAI/PMI will make the appropriate PTRS entry. See paragraph 4-1242 for a complete explanation of PTRS entry content and the associated job aid. If (1) an applicant seeks a new authorization for the operation of an aircraft that has been previously determined by the FAA to be an RVSM-Compliant Aircraft, (2) the new RVSM authorization applicant provides a written statement of compliance documenting that no modifications have been made to the aircraft that would change its status as an RVSM-Compliant Aircraft, and (3) no other information is provided or comes to light that calls into question the status of the aircraft as an RVSM-Compliant Aircraft, then the PAI/PMI should designate that aircraft as an RVSM-Compliant Aircraft with respect to the new applicant.

NOTE: An aircraft retains its status as an RVSM-Compliant Aircraft only so long as that aircraft continues to conform to its RVSM approved design, and continues to meet all applicable maintenance requirements. Therefore, an integral component of meeting item number (2) above – a compliance statement that the status of the aircraft has not changed – should affirmatively state that the aircraft does in fact have the same required equipment, has met all scheduled and unscheduled maintenance requirements, and address other items as appropriate.

#### **4-1235 MAINTENANCE PROGRAM.**

**A. Application for Authorization.** The application for authorization to operate within RVSM airspace must include an approved RVSM maintenance program. This program must outline procedures to maintain aircraft in accordance with the requirements of part 91 appendix G.

**B. Develop and Obtain Approval.** Operators without an approved aircraft maintenance program are required to provide and obtain approval of an RVSM maintenance program (an “RVSM-Approved Maintenance Program”). The aircraft RVSM design holder’s ICA provides the basis of an RVSM-Approved Maintenance Program. Individual aircraft may include additional requirements or changes in their programs. An RVSM-Approved Maintenance Program is not required to include elements not related to RVSM maintenance. Inspection programs such as an Approved Aircraft Inspection Program (AAIP) or manufacturer’s recommended inspection program do not satisfy the RVSM requirements because they do not

contain procedures to maintain RVSM aircraft. Operators who maintain their aircraft under a Continuous Airworthiness Maintenance Program (CAMP) may choose to incorporate the RVSM maintenance requirements into the program. Part 121 operators currently under ATOS should develop RVSM maintenance programs using the Safety Attribute Inspection (SAI) Job Aid 5.1.9.

**C. Approval.** An applicant may design their own RVSM maintenance program and submit it for approval or supply a previously approved program that they will employ. If a previously approved program is supplied the operator must be prepared to follow it in its entirety. It may not be specific to a different operator, different aircraft, or include elements that do not apply. The ASI will indicate approval of the operator's RVSM-maintenance program or acceptance of the previously approved program.

NOTE: The aircraft ICAs of a newly manufactured aircraft that has been designed to meet RVSM requirements are FAA approved and when submitted along with acceptable operator procedures fulfill the requirements of an approved RVSM maintenance program. The manufacturers recommended maintenance procedures when followed without exception are acceptable procedures and require no further review. The aircraft may not have been modified from its original RVSM design if the applicable ICAs and manufacturers recommended procedures are submitted for use. It is the operator's responsibility to provide or identify and reference these documents in a clear understandable manner.

**D. RVSM-Approved Maintenance Program Components.** Each RVSM-Approved Maintenance Program must include the following:

- 1) Identification of RVSM system components and identification of structural areas noted as RVSM critical areas.
- 2) The method the operator will use to ensure that all personnel performing maintenance on the RVSM system are properly trained, qualified, and knowledgeable of RVSM system.
- 3) The method the operator will use to ensure conformance to the RVSM maintenance standards including the use of calibrated and appropriate test equipment, and a quality assurance (QA) program for ensuring the continued accuracy and reliability of test equipment, especially when outsourced.
- 4) The method the operator will use to verify that components and parts are eligible for installation in the RVSM system, as well as to prevent the installation of ineligible components or parts.
- 5) The method the operator will use to return an aircraft to service after an appropriately rated person has performed maintenance on an RVSM component/system or after the aircraft was determined to be noncompliant.

NOTE: Maintenance providers may use built-in test equipment (BITE) testing of RVSM components and systems recommended by manufacturers and design holders in appropriate ICAs for return to service determinations.

6) Periodic inspections, functional flight tests, and maintenance and inspection procedures with acceptable maintenance practices for ensuring continued compliance with the RVSM aircraft requirements.

NOTE: The operator may list these elements in detail or describe them by reference to an acceptable program that identifies and controls through a revision or issue number. A complete reference includes the document title, part or document number, revision level and revision date.

NOTE: Functional flight testing, if required by the ICAs, may be accomplished through monitoring heightkeeping performance.

NOTE: The RVSM minimum monitoring requirements described in paragraph 4-1236 are operational requirements and are not considered part of the aircraft maintenance program.

7) The maintenance requirements listed in the ICA associated with any RVSM associated component or modification.

8) Any other maintenance requirement that the operator needs to incorporate to ensure continued compliance with RVSM requirements.

NOTE: The aircraft RVSM design holder's ICA provide the basis for RVSM-Approved Maintenance Program components D1, D6, D7, and D8 listed in subparagraph 4-1235D. These components are addressed in the manufacturer's recommended maintenance procedures for a standard configuration aircraft. Components D2, D3, D4, and D5 listed in subparagraph 4-1235D address how maintenance is performed and/or documented. These components may be addressed through compliance with 14 CFR part 43 requirements.

**E. RVSM Requirements.** Operators using the services of 14 CFR part 145 certificated repair stations (CRS) must include provisions to ensure that the repair station meets the requirements of their RVSM programs.

#### **4-1236 OPERATOR EVALUATION.**

**A. Person with Operational Control to Obtain RVSM Authorization.** It is the RVSM applicant's responsibility to submit a request for RVSM authorization in the name of the person that will have operational control of the aircraft. It is *not* the responsibility of the FSDO or a specific ASI to determine legal ownership or operational control of an aircraft with respect to an RVSM authorization, and if any question arises with respect to these issues, then the FSDO should refer such questions to the appropriate FAA Regional Counsel's office. (See Volume 3, Chapter 2, Section 2, Responsibility for Part 91 Letters of Authorization (LOA), paragraph 3-55.) The following general information, however, may be useful in assisting the FSDO, as well as an RVSM applicant, in determining if the appropriate party has been properly designated as the legal operator with respect to the RVSM authorization request:

1) For commercial and fractional ownership program operations conducted under parts 91K, 125, and 135, the authorization applicant and holder should be the operating certificate holder, air carrier certificate holder, or fractional ownership program manager, in which event the authorization will be issued in the form of an appropriate OpSpec or MSpec.

2) For non-commercial operations conducted under parts 91 and 125 (A125 Letter of Deviation Authority (LODA) holders), the authorization applicant and legal operator should normally be one of the following persons, in which event the authorization will be issued in the form of an appropriate LOA:

- A registered owner of the aircraft that is operating the aircraft incidental to its own non-air transportation business or personal activity.
- A person that has assumed operational control of the aircraft through a lease or use agreement for that person's operation of the aircraft incidental to that person's own non-air transportation business or personal activity.

NOTE: The legal operator will generally not be an owner trustee that is not operating the aircraft for its own business, a management company that has not accepted a transfer of operational control from the operator, or a holding company or bank that holds title to the aircraft solely for the purpose of leasing or transferring operational control of the aircraft to other persons.

NOTE: It is both possible and common to have multiple operators for part 91, 91K, and/or 125/135 aircraft over a short period of time and on a non-exclusive basis (for example, multiple dry leases for the use of any one aircraft can be in place at one time). In such instances, each individual operator is required to have an appropriate RVSM authorization issued in its own name in order for that operator to have access to RVSM airspace.

**B. RVSM-Knowledgeable Pilots.** To obtain authorization from the Administrator to conduct operations in RVSM airspace, the Administrator must find the operator to have adopted RVSM operating policies and/or procedures for pilots (and, if applicable, dispatchers) and ensure each pilot has adequate knowledge of RVSM requirements, policies, and procedures ("RVSM-Knowledgeable Pilots").

1) For an applicant that is operating only under part 91, demonstrating that it has RVSM-Knowledgeable Pilots will consist of providing sufficient evidence that each pilot has an adequate knowledge of RVSM requirements, policies and procedures as required in part 91 appendix G, § G3(c)(2). Refer to the current edition of AC 91-85, Authorization of Aircraft and Operators for Flight in Reduced Vertical Separation Minimum Airspace, paragraph 12 for acceptable examples.

2) For an applicant who operates under part 91K, 121, 125, or 135, in addition to meeting the adequate knowledge requirements for part 91 operators, that applicant will need to provide sufficient evidence of initial and recurring pilot training and/or testing requirements as well as policies and procedures that will allow the operator to conduct RVSM operations safely

as required in part 91 appendix G, § G3(b)(2) and (3) in order to demonstrate that they are using RVSM-Knowledgeable Pilots.

3) If (1) a subsequent applicant seeks a new authorization for the operation of an aircraft in RVSM airspace and that operator is using pilots (and dispatchers where required) that have been previously determined by the FAA to be RVSM-Knowledgeable Pilots, (2) the new applicant provides a written statement of compliance documenting that the pilots they propose using still meet the requirements with respect to their status as RVSM-Knowledgeable Pilots and that the new applicant will be conducting the same type of operations (e.g., parts 91, 91K, 121, 125, 135) as applied to the previously adopted RVSM-Knowledgeable Pilots, and (3) no other information is provided or comes to light that calls into question whether the pilots have retained their status as RVSM-Knowledgeable Pilots for the type of operation they will conduct, then the POI should accept those pilots as meeting the RVSM-Knowledgeable Pilots requirement with respect to the new applicant.

**C. Additional Requirements to Obtain Authorization.** In addition to the requirements set forth in subparagraph 4-1236B, the RVSM authorization applicant must meet the following requirements:

1) The minimum equipment list (MEL), if used, must incorporate the required changes stated in Master Minimum Equipment List (MMEL) GC-59 (formerly Policy Letter PL-84), dated August 15, 1997.

2) The RVSM authorization applicant must provide a procedure for initial aircraft monitoring and meeting RVSM minimum monitoring requirements.

3) The RVSM authorization applicant must also provide the method the operator will use to notify the crew if the aircraft has been restricted from RVSM, but is Airworthy for an intended non-RVSM flight.

NOTE: Element C3 addresses how maintenance is performed. This element may be addressed through compliance with 14 CFR part 43 requirements.

**D. Required Monitoring.** Operators that have been issued a U.S. RVSM authorization are required to have their aircraft RVSM height monitored, in accordance with the RVSM Minimum Monitoring Chart, every 2 years or within intervals of 1,000 flight hours, whichever period is longer.

1) Operators are not required to complete the height-monitoring requirements prior to being granted operational approval. However, operators that cannot show evidence of the last successful height monitoring, or the height monitoring for the aircraft is out of date, have 6 months from the date the authorization is issued to meet the monitoring requirement.

2) Evidence of previous successful monitoring of an aircraft transfers to a new owner and/or operator and may be used to meet the monitoring requirements.



3) When calculating the 1000-hour provision of the minimum monitoring requirement, the calculation of the flight time should be from the last valid monitoring date on record. Flight logbook data should be sufficient to meet this element.

4) See Volume 4, Chapter 1, Section 5, Special Navigation Areas of Operation, for additional information regarding RVSM Monitoring. The RVSM Minimum Monitoring Chart can be found in the Monitoring section of the FAA RVSM Documentation Web page.

**E. Responsible Person for RVSM Authorizations.** For part 91 RVSM applicants, the application for authorization to operate within RVSM airspace must include the designation of a Responsible Person, and may further include the designation of a separate RVSM point of contact (POC), as follows:

1) The operator should designate a person(s) under this subparagraph 4-1236E who has the legal authority to sign the RVSM authorization on behalf of the operator and who has adequate knowledge of RVSM requirements, policies and procedures, which person may be the individual person who will be the operator, or, if the operator is a legal entity, then an officer or employee of that entity, or a separate person who that individual person or entity has contracted with in order to act on behalf of the individual person or legal entity with respect to the RVSM authorization. See Volume 3, Chapter 2, Section 2, for responsibilities related to part 91 LOAs.

2) The operator should also designate a person(s) to act as a contact person who has actual day-to-day knowledge of the RVSM-Compliant Aircraft operations and maintenance status that the FAA may contact to gather such information when such a need arises.

3) The operator may use one individual to fulfill both roles as described in subparagraphs 1) and 2) above, or the operator may elect to designate separate persons to fulfill these roles.

4) Whoever the operator designates to fulfill the role described in subparagraph 1) above will be designated as the Responsible Person, and that Responsible Person will sign LOA B046, as appropriate.

5) If the operator chooses to use separate individuals, then the person fulfilling the role described in subparagraph 2) above will be designated as the "RVSM POC." In such an event, the separate person designated as the RVSM POC (i.e., someone who has not also been designated as a Responsible Person) will not have any authority to sign the RVSM authorization on behalf of the operator. Additionally, if an operator has designated a separate RVSM POC, then that is the individual the FAA should first contact with respect to the operator's RVSM-Compliant Aircraft operations and maintenance status.

6) In any event, the Responsible Person and/or the RVSM POC should be a person that has ongoing knowledge of the operations of the aircraft under the RVSM authorization.

7) Additionally, it generally is not appropriate to designate an "Agent for Service" with respect to RVSM authorizations that are being issued to part 91.

**F. Coordination.** The appropriate FSDO, CHDO, or IFO manager, in coordination with the PAI, PMI, and POI, will issue the OpSpecs, MSpecs or LOAs after determination of an RVSM-Compliant Aircraft; approval of the RVSM-Approved Maintenance Program; and acceptance of operator RVSM-Knowledgeable Pilots requirements. Upon issuance, the POI will make the appropriate PTRS entry (see Table 4-23, Activity Numbers for Section I, Block 3). Refer to AC 91-85, paragraph 12 for examples required for authorization submission.

NOTE: A PAI, PMI, or POI may sign OpSpecs, MSpecs, and LOAs for the manager (when authorized).

#### **4-1237 RVSM DECISION MATRIX.**

**A. RVSM Applicant Procedures.** Any applicant for an administrative change to an existing RVSM authorization should submit such documentation as is called for in Group I of the RVSM Decision Matrix described in subparagraph 4-1237C. Any applicant for a new RVSM authorization should submit sufficient documentation establishing that it will use an RVSM-Compliant Aircraft, RVSM-Approved Maintenance Program, and RVSM-Knowledgeable Pilots. If the applicant is submitting a new application that does not rely on any previously accepted RVSM Authorization Element, then the application will be processed in accordance with Group III of the decision matrix. If the applicant seeks to rely on one or more previously accepted RVSM Authorization Elements, that applicant should review Group II of the decision matrix to determine what additional information should be provided, as applicable, with respect to the proposed use of a previously accepted RVSM Authorization Element in order to benefit from the efficiencies created by the matrix.

**B. FSDO Approval Procedures.** Once an applicable CHDO, FSDO, or IFO has received a written request for service from an applicant for a new RVSM authorization, that FSDO will process that request using the following general guidance:

1) Determine which of the Authorization Groups in the RVSM Decision Matrix in subparagraph 4-1237C applies.

2) In the event an existing RVSM authorization holder seeks to move its RVSM authorization to a new controlling FSDO, or a new RVSM authorization applicant submits an application to a FSDO that includes the use of one or more existing RVSM Authorization Elements that have been previously accepted by a different FSDO, then the requested FSDO should adopt and accept those previously accepted RVSM Authorization Elements absent any information provided as part of the application that raises questions or concerns with respect to the ongoing validity or applicability of those previously accepted RVSM Authorization Elements.

3) Although guidance has been created in order to allow for the most efficient processing of an RVSM authorization request as possible without sacrificing operational safety, and a safety inspector may rely on this guidance in issuing new or amended RVSM authorizations, each FSDO, CHDO, IFO, POI, PAI, PMI and/or ASI retains the authority to conduct as much review and research with respect to any proposed RVSM-Compliant Aircraft,

RVSM-Approved Maintenance Program or RVSM-Knowledgeable Pilots requirements as is warranted in order to ensure safety and regulatory compliance requirements have been met.

NOTE: It is the operators responsibility to ensure that documentation reflects the requirements for authorization. A positive statement by the operator detailing any changes made to previously approved programs assists the inspector in determining the level of review necessary to meet the burden listed above. For example, it would be inappropriate for an operator to submit documentation containing a previous operators name or contacts.

**C. RVSM Decision Matrix.** Each RVSM authorization applicant and each FSDO that has received an RVSM authorization request will use the following RVSM Decision matrix, in conjunction with the definitions and procedures with respect to the matrix and RVSM Authorization Elements described in paragraphs 4-1234, 4-1235, and 4-1236 above, in order to request and process the applicable RVSM authorization application.

**Figure 4-87. RVSM Decision Matrix**

<b>RVSM DECISION MATRIX</b>	
<p align="center"><b>AUTHORIZATION GROUP I:</b></p> <p align="center"><b>RVSM AUTHORIZATION AMENDMENTS</b></p> <ul style="list-style-type: none"> <li>The following changes are considered to be administrative in nature only.</li> <li>This group <i>only</i> applies in circumstances where a previously authorized RVSM operator and each of the previously accepted RVSM Authorization Elements <i>are remaining the same</i>.</li> </ul>	
<b>I.</b>	<b>A. Examples of Requested Action/Nature of Change</b>
	<ol style="list-style-type: none"> <li>Change in the primary business address of an RVSM-Compliant Aircraft and/or RVSM authorization holder.</li> <li>Change in an existing RVSM operator's designated Responsible Person (or RVSM-Authorized Representative or RVSM Point of Contact (POC)).</li> <li>Change in the registration markings of an RVSM-Compliant Aircraft being operated by an existing RVSM authorization holder.</li> <li>Removal of an RVSM-Compliant Aircraft from an existing RVSM authorization that has multiple RVSM-Compliant Aircraft listed.</li> </ol>

<b>I.</b>	<b>B. Applicable Steps and Information Required from RVSM Authorization Holder</b>
	<ol style="list-style-type: none"> <li>1. Prior to making a request for service for an authorization amendment, each existing authorization holder should make a positive determination as to which portions of the previously accepted RVSM Authorization Elements authorization to changing.</li> <li>2. That authorization holder should then submit a written request to the controlling FSDO, CHDO, or IFO that: <ol style="list-style-type: none"> <li>a. States which of the applicable administrative changes are occurring;</li> <li>b. Further affirmatively states that none of the previously accepted RVSM Authorization Elements that formed the basis for the initial issuance of the affected RVSM authorization have changed or are changing; and</li> <li>c. Requests the issuance of an amendment to the existing RVSM authorization that acknowledges the administrative change being made.</li> </ol> </li> <li>3. If the nature of the requested amendment is to change the primary business address from one FSDO, CHDO, or IFO service area to another, it must notify, in writing, the losing (previously responsible) FSDO, CHDO, or IFO of the new physical location and mailing address within 30 calendar-days following relocation. The losing FSDO, CHDO, or IFO must request that the WebOPSS Help Desk move the operator's database to the appropriate receiving FSDO, CHDO, or IFO. The losing FSDO, CHDO, or IFO must also notify the receiving FSDO, CHDO, or IFO of the change. The receiving FSDO, CHDO, or IFO should then update and reissue the operator's A001 template to reflect the new address, and the receiving FSDO, CHDO, or IFO becomes the responsible FSDO, CHDO, or IFO for processing new LOAs for that operator.</li> <li>4. The authorization holder should also provide such further information as the FSDO, CHDO, or IFO may request in order to efficiently process the request.</li> </ol>
<b>I.</b>	<b>C. Applicable Procedures to be Followed by the Appropriate FSDO, CHDO, or IFO</b>
	<ol style="list-style-type: none"> <li>1. Review the request and supporting documentation received from the RVSM authorization applicant to determine if it appears that an amended RVSM authorization amendment is warranted.</li> <li>2. Re-issue the amended RVSM authorization that is identical to the initial RVSM authorization in all respects other than reflecting the new amended information; and</li> <li>3. If the nature of the requested amendment is to change the primary business address from one FSDO service area to another, see the additional applicable guidance in Volume 3, Chapter 2, Section 2, Responsibility of Part 91 Letters of Authorization (LOA).</li> </ol>

	<p>4. If an existing RVSM authorization holder has made a written affirmation that none of the underlying previously accepted RVSM Authorization Elements has changed or will change, and there is no other information provided to the FSDO raising any questions or concerns with respect to the ongoing validity or applicability of those RVSM Authorization Elements, then, subject to subparagraph 4-1237B3), the FSDO, CHDO, or IFO should issue the requested amendment without further inspections being required.</p>
<p style="text-align: center;"><b>AUTHORIZATION GROUP II:</b></p> <p style="text-align: center;"><b>RVSM AUTHORIZATION BASED ON</b></p> <p style="text-align: center;"><b>ONE OR MORE EXISTING APPROVED RVSM AUTHORIZATION ELEMENTS</b></p> <ul style="list-style-type: none"> <li>• The following RVSM authorizations are new authorizations.</li> <li>• This group will normally apply to a new or proposed RVSM operator that is seeking the issuance of an RVSM authorization for an aircraft that is already an RVSM-Compliant Aircraft or where the new RVSM operator will be utilizing a previously accepted RVSM–Approved Maintenance Program and/or previously accepted RVSM-Knowledgeable Pilots requirements with respect to its operations of that specific aircraft.</li> </ul>	
<b>II.</b>	<b>A. Examples of Requested Action/Nature of Change</b>
	<ol style="list-style-type: none"> <li>1. There is a change in the legal status or identity of the business entity that is the Approved RVSM Operator, but the Responsible Person, RVSM Authorized Representative, and/or RVSM Contact Person and each of the Approved RVSM Authorization Elements are remaining the same. <ol style="list-style-type: none"> <li>a. One example of this situation may occur where an operator is converted from an S-corporation to a limited liability company, for example, under applicable state law, but no other changes are occurring.</li> <li>b. Another example may occur where the ownership and operation of an aircraft is transferred from one company to a legal affiliate, but there are no other changes occurring.</li> </ol> </li> <li>2. A new proposed RVSM operator will be using an existing RVSM-Compliant Aircraft, together with a previously accepted RVSM-Approved Maintenance Program and/or previously accepted RVSM-Knowledgeable Pilots requirements. Examples of this type of situation may include: <ol style="list-style-type: none"> <li>a. An operator takes delivery of a newly-manufactured aircraft that is type-certified as RVSM-compliant. The operator provides a written statement that the manufacturer’s approved RVSM maintenance program will be used without deviation.</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>b. An Approved RVSM Aircraft is being operated under an RVSM authorization issued to a part 135 air carrier, and the underlying owner or a separate lessee will occasionally use that specific aircraft while it is maintained under part 135 air carrier's RVSM-Approved Maintenance Program and/or the same RVSM-Knowledgeable Pilots requirements.</li> <li>c. A group of underlying owners or lessees use an RVSM-Compliant Aircraft, each maintaining their own operational control of that aircraft pursuant to a dry lease, while also utilizing the same previously accepted RVSM-Approved Maintenance Program and/or the same RVSM-Knowledgeable Pilots requirements.</li> </ul> <p>3. An existing or new proposed Approved RVSM Operator seeks an RVSM authorization and will be utilizing one or more existing Approved RVSM Authorization Elements.</p> <ul style="list-style-type: none"> <li>a. An example may be where an existing RVSM operator seeks to add a new proposed RVSM-Compliant Aircraft to an existing RVSM authorization where that operator will continue to use an already accepted RVSM-Approved Maintenance Program (applicable to the specific RVSM design) and/or previously accepted RVSM-Knowledgeable Pilots requirements.</li> </ul>
<b>II.</b>	<b>B. Applicable Steps and Information Required from RVSM Authorization Applicant</b>
	<ul style="list-style-type: none"> <li>1. Make a positive determination that the existing or new proposed RVSM operator is seeking an RVSM authorization that will utilize at least one previously RVSM Authorization Element (i.e., an existing RVSM-Compliant Aircraft, an RVSM-Approved Maintenance Program, and/or RVSM-Knowledgeable Pilots requirements).</li> <li>2. Submit a written request to the controlling FSDO, CHDO, or IFO that: <ul style="list-style-type: none"> <li>a. Provides complete documentation of an RVSM compliance program, including written information evidencing that the specific aircraft meets the requirements of an RVSM-Compliant Aircraft;</li> <li>b. Further specifically states that an existing RVSM-Approved Maintenance Program and/or previously accepted RVSM-Knowledgeable Pilots requirements will be used with respect to the operation of the proposed Approved RVSM Aircraft in RVSM airspace, as applicable;</li> <li>c. Provides such additional information as necessary to evidence compliance with a new or different RVSM-Approved Maintenance Program and/or new or different RVSM-Knowledgeable Pilots requirements (or to be able to gain such approvals); and</li> <li>d. Asks for the issuance of an RVSM authorization that applies to the operation of the aircraft by that proposed RVSM operator.</li> </ul> </li> </ul>

	3. Provide such further information as the FSDO, CHDO, or IFO may request in order to efficiently process the request.
<b>II.</b>	<b>C. Applicable Procedures to be Followed by the Appropriate FSDO, CHDO, or IFO</b>
	<ol style="list-style-type: none"> <li>1. Review the request and supporting documentation received from the RVSM Authorization Applicant to determine if it appears that the requested RVSM Authorization is warranted.</li> <li>2. To the extent the RVSM applicant has provided written documentation evidencing that the operator will be using a previously accepted RVSM Authorization Element, and accept that RVSM Authorization Element as a valid basis for the issuance of the new RVSM authorization, and to the extent the applicant has presented a proposed RVSM Authorization Element that has not been previously reviewed and accepted, conduct such additional review and research with respect to that RVSM Authorization Element only as is required to issue the new RVSM authorization.</li> <li>3. If an RVSM applicant has made a written affirmation that one or more of the underlying previously accepted RVSM Authorization Elements have not changed or will not change, there is no other information provided to the FSDO, CHDO, or IFO raising any questions or concerns with respect to the ongoing validity or applicability of those RVSM Authorization Elements, and the applicant has otherwise presented sufficient evidence of compliance with the requirements of the remaining RVSM Authorization Elements, then, subject to subparagraph 4-1237B3), the FSDO, CHDO, or IFO should issue the requested amendment without further inspections being required.</li> </ol>
<p style="text-align: center;"><b>AUTHORIZATION GROUP III:</b></p> <p style="text-align: center;"><b>RVSM AUTHORIZATION NOT BASED ON ONE OR MORE EXISTING RVSM AUTHORIZATION ELEMENTS</b></p> <ul style="list-style-type: none"> <li>• In the event a proposed new or existing Approved RVSM Operator seeks the issuance of an RVSM authorization that will not be based on any existing RVSM Authorization Element, then neither Authorization Group I nor II above will apply, the proposed Approved RVSM Operator should submit sufficient evidence to show its ability to comply with each of the RVSM Authorization Elements, and the FSDO, CHDO, or IFO should process the request as a new and unique request by reviewing all of the materials provided by the applicant to ensure that each of the RVSM Authorization Elements have been met.</li> </ul>	

**4-1238 COORDINATION REQUIREMENTS.** This task requires coordination between Airworthiness and Operations ASIs.

**4-1239 REFERENCES, FORMS, AND JOB AIDS.****A. References (current editions):**

- Title 14 CFR Parts 43, 91, 91K, 121, 125, 135, and 145.
- Advisory Circular (AC) 91-85, Authorization of Aircraft and Operators for Flight in Reduced Vertical Separation Minimum Airspace.
- Volume 4, Chapter 1, Section 5, Special Navigation Areas of Operation.

**B. Forms.** None.**C. Job Aids:**

- SAI Job Aid 5.1.9.
- PTRS RVSM Data Entry Job Aid (see Figure 4-88).

**4-1240 PROCEDURES.****A. Accepting a Previously Approved RVSM Authorization Element.**

1) If accepting a previously approved RVSM Authorization Element, in accordance with Figure 4-87, the inspector will enter the appropriate PTRS activity code (nn13) and document the acceptance of a previously approved Authorization Element in the comments section.

**B. Determination of Aircraft Compliance.** Determine if the aircraft meets the requirements of part 91 appendix G, § G2 and is RVSM-compliant (see paragraph 4-1234).

**C. Evaluation and Approval of Operator's RVSM Maintenance Program.** Review the RVSM maintenance program to ensure that it contains the elements described in subparagraph 4-1235D.

**D. Evaluate RVSM-Knowledgeable Pilots.** Determine if the operator meets the operational elements of part 91 appendix G (see paragraph 4-1236).

**4-1241 TASK OUTCOMES.****A. Determine Aircraft RVSM Compliance.**

1) If it is determined that an aircraft is RVSM-compliant, the PAI or PMI will complete the PTRS record with the date of modification or RVSM compliance date in the "Comments" field and will notify the applicant in writing. The activity code for this work function will be 3411 (maintenance) or 5411 (avionics) for initial airframe acceptance (determination of compliance).

2) If it is determined that an aircraft is not RVSM-compliant, advise the operator/applicant by letter of the determination with an explanation.



**B. Approve or Reject Aircraft Maintenance Program/Revision.**

1) Upon approval or rejection of the applicant's RVSM program, the PAI or the PMI will make an entry in the PTRS and notify the applicant. The activity code for this work function will be 3413 (maintenance) and 5413 (avionics).

2) If it is determined that a submitted approved RVSM maintenance program meets all of the regulatory requirements of the operator without the need for revision, the operator may be authorized to employ that program without further review or approval. The PAI or PMI will identify and record the approval date of that program in the PTRS entry.

3) If it is determined that the RVSM maintenance program or revision meets all of the regulatory requirements and requires approval, the approval process is as follows:

a) Approved maintenance programs must include a List of Effective Pages (LEP) and a revision log to document as the applicant incorporates future revisions.

b) Indicate approval of RVSM maintenance program elements that the applicant will incorporate into an existing accepted or approved program for each element or group of elements by the inspector's signature, date of approval, office name, number, and location.

c) Indicate approval of RVSM maintenance programs submitted as standalone on the cover page of the program together with the date of approval, inspector's signature, office name, number, and location. Stamp each succeeding page of the program with the district office stamp and date and initial it.

d) The PAI/PMI may use other approval controls.

4) If the PAI/PMI determines that the aircraft maintenance program/revision is not acceptable, advise the operator/applicant by letter that the program has been rejected. The inspector must return the program/revision to the operator/applicant with the reasons for the rejection.

**4-1242 PTRS DATA ENTRY JOB AID FOR RVSM.**

**I A. RVSM PTRS Data Entry Job Aid.** Figure 4-88 is a job aid that is intended to aid inspectors in making PTRS data entries for RVSM and standardize RVSM PTRS data.

1) **Aircraft Status for RVSM Monitoring.** Many operators have aircraft monitored immediately after the completion of RVSM required modifications and/or inspections. The information in the job aid will enable the Separation Standards Analysis Branch (ANG-E61) to confirm that the aircraft was RVSM-compliant when the RVSM monitoring flight was conducted. (ANG-E61 responsibilities are detailed below.)

NOTE: It is imperative that inspectors update the PTRS in a timely manner.

2) **RVSM Approvals Database.** The ANG-E61 team at the William J. Hughes Technical Center (ACT) retrieves PTRS information to maintain a database of U.S. RVSM

aircraft and operator approvals. This database is used to complete RVSM safety assessment and safety oversight tasks. The data is used with periodic traffic samples to identify unapproved operations in RVSM airspace. The database is also forwarded to international bodies tasked with tracking RVSM aircraft/operator approval and conducting safety analyses.

NOTE: This information is being used to find and investigate aircraft that fly at RVSM flight levels (FL), but are not RVSM-approved. The database of RVSM approvals is *not*, however, used in real-time to grant or deny clearance into RVSM airspace.

**B. Separate PTRS Entries.** Inspectors must make separate PTRS entries as follows:

1) When the inspector determines that operator aircraft are RVSM-compliant, the inspector must update the PTRS in accordance with Section IV of the job aid shown in Figure 4-88.

2) When the inspector approves the operator's RVSM maintenance program, the inspector must update the PTRS.

3) For aircraft manufactured RVSM-compliant, the AFM and/or TCDS will show RVSM compliance. In accordance with Table 4-23 and Figure 4-88, the date entered will be the date that the aircraft Airworthiness Certificate was issued.

4) When OpSpecs or an LOA is issued, the inspector must update the PTRS.

5) The inspector *must update* "other" actions. "Other" actions include, but are not limited to:

- N-number change;
- Withdrawal of RVSM approval due to transfer of airframe to a different operator;
- Investigation of heightkeeping error report; and/or
- Notification from operator of successful height monitoring to comply with the RVSM minimum monitoring requirements.

**C. Fax or Email to ANG-E61.** If there are questions in regard to PTRS inputs, inspectors can contact the U.S. Operator/Aircraft RVSM Approvals Database and Monitoring Coordinator, Wayne Smoot, by:

- Phone: 609-485-5475,
- Fax: 609-485-5078, or
- Email: wayne.smoot@faa.gov.

**D. System Update.** The FSDO, CMO, or IFO will update the system, as a minimum, with the specific items listed in Table 4-23 and Figure 4-88.

**E. Specific Entries for the PTRS RVSM Data Entry Job Aid.** Inspectors should enter the information below in the sections of the data sheet as shown:

**1) Section I—Transmittal RVSM Approval.**

- a) Block 3, Activity Number: See Table 4-23.
- b) Block 4, 14 CFR: 91, 91K, 121, 125, or 135.
- c) Block 11, Designator: 4-letter code for parts 121, 125, and 135 operators.
- d) Block 14, Aircraft Reg #: Aircraft registration number.
- e) Block 20, Make, Model, and Series (M/M/S): Aircraft M/M/S.
- f) Block 24, Non-Cert Activity Name/Company: Aircraft operator name.  
(Required only for part 91 operators. Prohibited for parts 121, 125, and 135 operators).
- g) Block 42, National Use: RVSM.

**2) Section III—Equipment.** Block 55, Aircraft Serial Number.

**3) Section IV—Method of Compliance/Comments.** Section IV of Figure 4-88 provides inputs for the primary area, key words, opinion code, and text.

NOTE: The first three rows of Section IV provide options to describe the work accomplished to bring the aircraft into RVSM compliance. The inspector should complete the line that best describes the action taken.

**Table 4-23. Activity Numbers for Section I, Block 3**

	<b>Inspector Determination of Aircraft Reduced Vertical Separation Minimum (RVSM) Compliance</b>	<b>RVSM Maintenance Program Approval</b>	<b>Letter of Authorization (LOA), Management Specification (MSpecs), or Operations Specification (OpSpecs) Granted</b>	<b>Other Actions</b>
Operations Activity Code	None	None	1411	1413
Airworthiness Activity Code	3411	3413	3413	3413
Avionics Activity Code	5411	5413	5413	5413

**Figure 4-88. PTRS RVSM Data Entry Job Aid**

<b>PTRS RVSM Data Entry Job Aid</b>			
<b>Section I—Transmittal RVSM Approval</b>			
(1) Inspector Name Code: (initials)			
(2) Record ID: (generated by system)	(3) Activity Number: See Table 4-23.		(4) 14 CFR: (91/91K/121/125/135)
(5) NPG: (not used)	(6) Status:		(7) Callup Date: (not used)
(8) Start Date: (as appropriate)	(9) Results: (as appropriate)		(10) Closed Date: (as appropriate)
(11) Designator: (4-letter code for part 121/125/135)	(12) Affiliated Designator: (not used)		(13) OTNA: (not used)
(14) Aircraft Reg #:	(15) Location /Departure Point: (not used)		(16) Location/Arrival Point: (not used)
(20) Make, Model, and Series (M/M/S):			(21) Incident #: (not used)
(24) Non-Cert Activity Name/Company: (aircraft operator name, part 91, or A125 LODA only.)			(25) Accident #: (not used)
(40) Local Use:		(41) Regional Use:	(42) National Use: (RVSM)
<b>Section III—Equipment</b>			
Manufacturer (53)	Model (54)	Serial # (55)	Remarks (23 Characters) (56)
<b>Section IV—Method of Compliance/Comments</b>			
(57) Primary Area	(58) Key Word	(59) Opinion Code	(60) Text
F or G	617	I	<i>Option 1. Service Bulletin(s) (SB), Other Document Scenario.</i> Date (mmddyyyy) aircraft modified and/or inspected per SBs ( <i>number(s)</i> ) or other approved RVSM document(s) by ( <i>name</i> ) repair station or other modification facility.
F or G	617	I	<i>Option 2. STC(s) Scenario.</i> Date (mmddyyyy) aircraft modified/inspected per STC(s) ( <i>number(s)</i> ) by ( <i>name</i> ) repair station or other modification facility.
F or G	617	I	<i>Option 3. Aircraft Manufactured RVSM-Compliant.</i> Date (mmddyyyy) aircraft airworthiness certificate issued.
F or G	617	I	<i>FSDO or CMO Determination of Aircraft RVSM compliance.</i> Date (mmddyyyy) FSDO, CMO, or IFO inspector determined aircraft to be RVSM compliant, including TCAS II Version 7.0 incorporated ( <i>if aircraft TCAS II equipped</i> ).
F or G	643	I	<i>RVSM Maintenance Program Approval.</i> Date (mmddyyyy). RVSM maintenance program approval.
B	643	I	<i>LOA Number and Dates.</i> Date (mmddyyyy) LOA issued.
B	643	I	<i>D098 Date.</i> Date (mmddyyyy) issued and date expires (mmddyyyy).
A or B	643	I	<i>Operations comments.</i> For example: Name of agent for service; company phone number; other.
A or B	643	I	<i>Avionics and/or Maintenance Comments.</i>
A or B	719	I	<i>LOA, MSpec, or OpSpecs Withdrawal.</i> LOA or OpSpecs withdrawn on date (mmddyyyy) due to ( <i>reason</i> ).
(61) Date: _____ Originator: _____ Office: _____ Inspector Signature: _____ Supervisor Initials: _____			

**RESERVED.** Paragraphs 4-1243 through 4-1260.